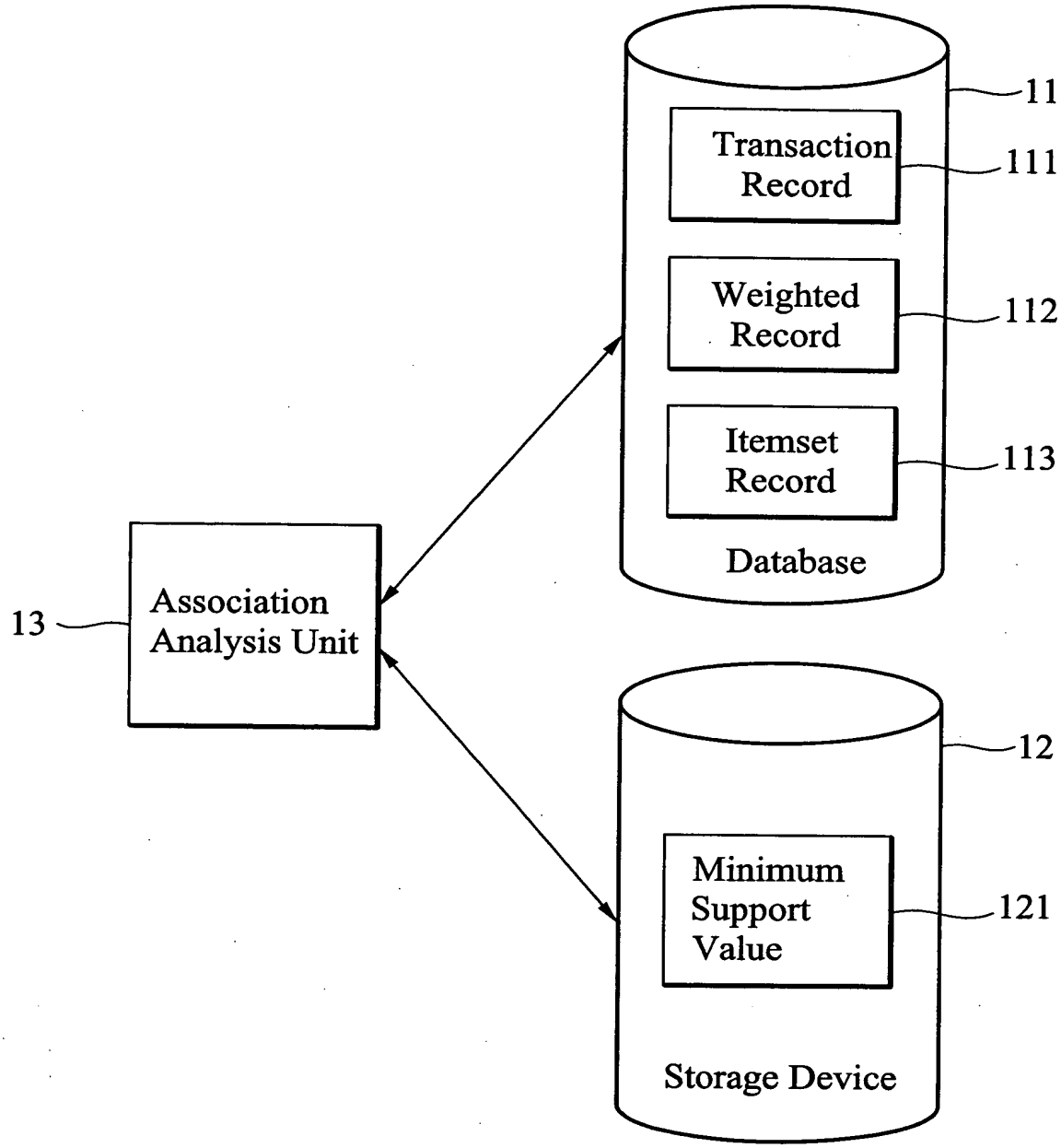
11
Transaction Record
111
Weighted Record
112
Itemset Record
113
Database
13
Association Analysis Unit
12
Minimum Support Value
121
Storage Device

FIG. 1

Partition Identity	Time Scale	Weighted Value
P1	Jan-01~Jan-31	0.5
P2	Feb-01~Feb-28	1
P3	Mar-01~Mar-30	2

FIG. 2

Partition Identity	Transaction Identity	Transaction Items
P1	t1	B D
P1	t2	A D
P1	t3	B C D
P1	t4	B C
P2	t5	D E
P2	t6	A B C
P2	t7	B C E
P2	t8	C D E
P3	t9	A D
P3	t10	B D F
P3	t11	B C E F
P3	t12	B F

FIG. 3

Candidate Flag	2-Itemset	Initiated Partition	Weighted Frequecy
	AD	P1	1*0.5=0.5
	BC	P1	2*0.5=1
o	BD	P1	2*0.5=1
o	CD	P1	1*0.5=0.5

FIG. 4

Candidate Flag	2-Itemset	Initiated Partition	Weighted Frequecy
	AB	P2	1*1=1
	AC	P2	1*1=1
o	BC	P1	1+2*1=3
	BD	P1	1+0*1=1
	BE	P2	1*1=1
	CD	P2	1*1=1
o	CE	P2	2*1=2
o	DE	P2	2*1=2

FIG. 5

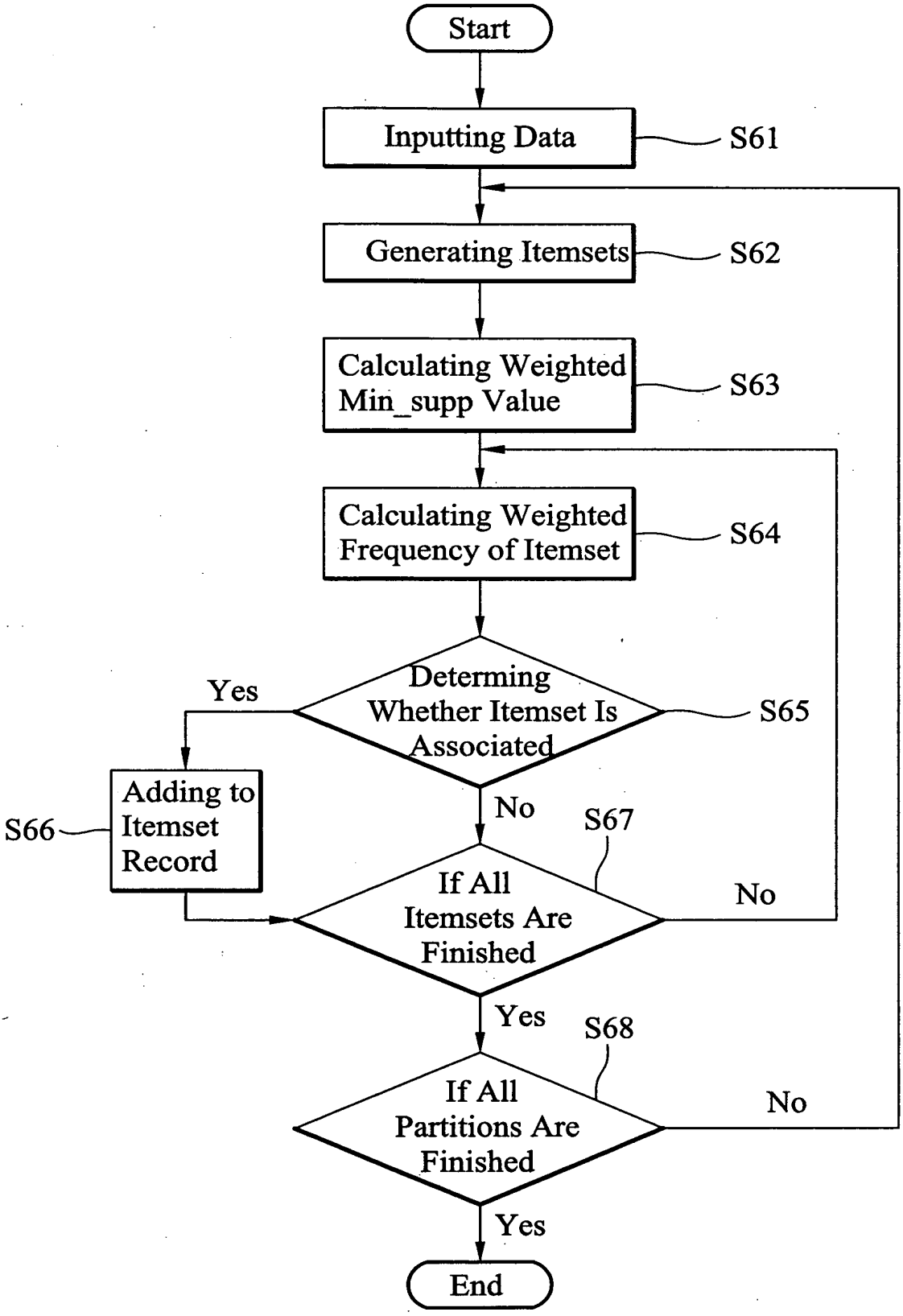
Start
Inputting Data
S61
Generating Itemsets
S62
Calculating Weighted Min_supp Value
S63
Calculating Weighted Frequency of Itemset
S64
Determing Whether Itemset Is Associated
S65
Yes
No
Adding to Itemset Record
S66
S67
If All Itemsets Are Finished
No
Yes
S68
If All Partitions Are Finished
No
Yes
End

FIG. 6

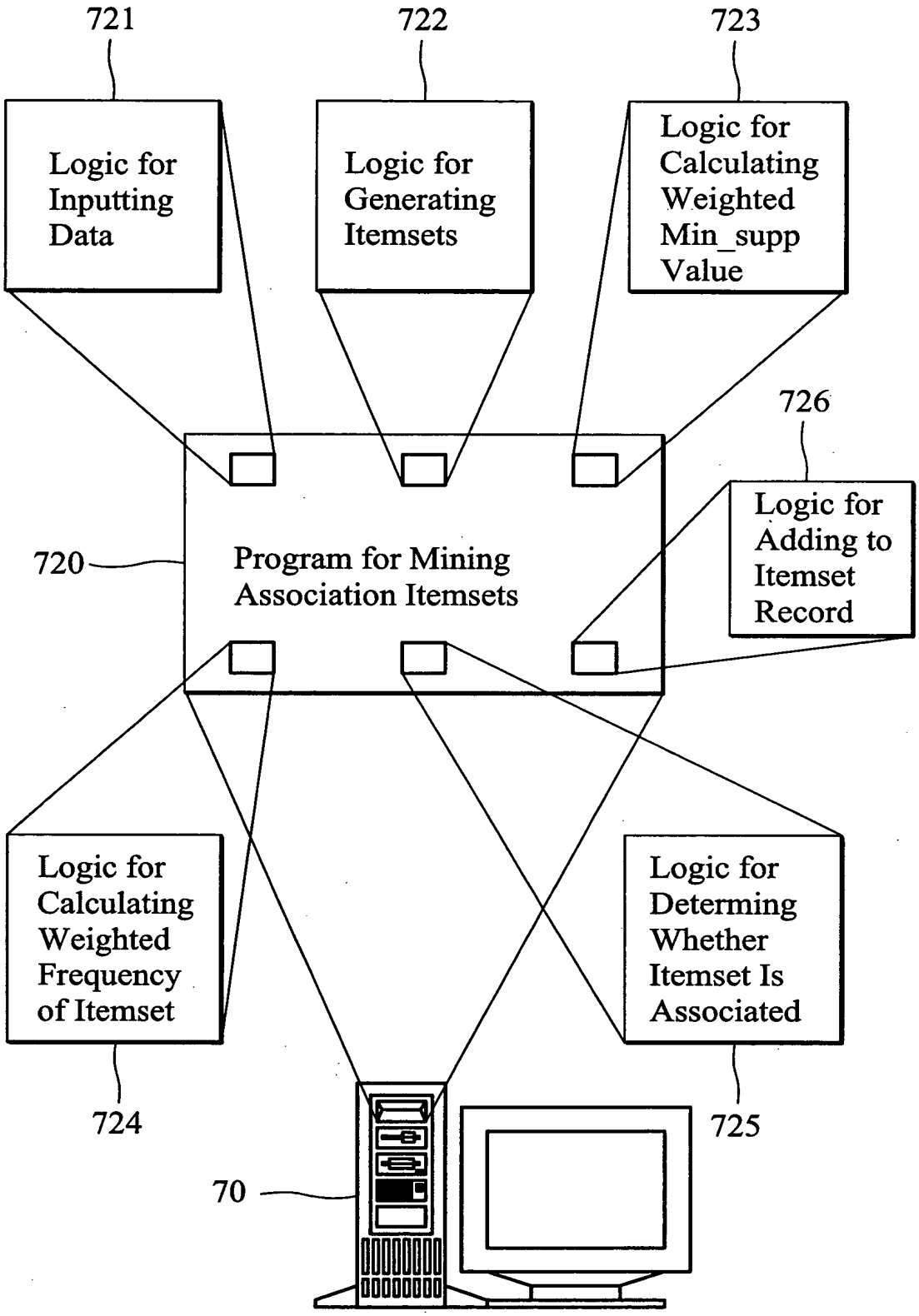
721
722
723
Logic for Inputting Data
Logic for Generating Itemsets
Logic for Calculating Weighted Min_supp Value
726
Logic for Adding to Itemset Record
720
Program for Mining Association Itemsets
Logic for Calculating Weighted Frequency of Itemset
Logic for Determing Whether Itemset Is Associated
724
725
70

FIG. 7